



SMART POWER

Product environmental information

Aluminium enclosed and safety switches,
BON_, KSE_, KSF_ and LBAS_

Product Conformity & Compliance

REACH and SVHC (Regulation EC 1907/2006)

With reference to the Regulation (EC) No. 1907/2006 issued by the European Union for the Registration, Authorization and Restriction of Chemicals (REACH), please be aware that:

- During normal and reasonably foreseeable conditions use, BON_/LBA_/LBAS_/KSE_/KSF_ enclosed and safety switches manufactured by ABB Oy, Smart Power do not internationally release any substance or preparation;
- ABB Oy, Smart Power continuously assessment

BON_/LBA_/LBAS_/KSE_/KSF_ enclosed and safety switches were classified as Articles and during normal reasonably foreseeable conditions of use, do not internationally release any substance or preparation.

ABB Oy, Smart Power continuously undertake communication throughout its supply chain in order to collect information about suppliers' compliance with REACH regulation.

RoHS and RoHS II

Based on the information provided by our suppliers, and to the best of our knowledge, ABB Oy Smart Power designates that the BON_/LBA_/LBAS_/KSE_/KSF_ enclosed and safety switches are RoHS Compliant and conform to Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) amended by the EU Directive 2015/863.

SVHC (Regulation EC 1907/2006 REACH)

ABB Oy, Smart Power continuously assesses its products for content of Substances of Very High Concern (SVHC), as included in the "Candidate List" by the European Chemicals Agency (ECHA). According to our best knowledge, BON_/LBA_/LBAS_/KSE_/KSF_ do not contain SVHC substances exceeding 0.1% w/w.

WEEE

BON_/LBA_/LBAS_/KSE_/KSF_ are compliant and in the scope Waste of Electrical and Electronics equipment (WEEE) Directive 2012/19/EU.

Product Safety

The product has been tested according to standards:

IEC/EN60947-1

IEC/EN60947-3

IEC/EN60529

Directives:

"Low Voltage Directive" (LDV) 2014/35/EC

"Electromagnetic Compatibility Directive" (EMC) 2014/30/EC

Material declaration

The charts below the constituents of BON_/LBAS_/KSE_/KSF_ enclosed and safety switches. The constituent materials are distributed as follows.

The total weight of the products is the follows:

BON_/LBAS_16: 0,6 kg

BON_/LBAS_/KSE_/KSF_16: 0,6-0,8 kg

KSE_/KSF_40: 0,8 kg

Material declaration

Material	LBAS316TPN, 3 pole Weight (g)	LBAS316TPN, 3 pole (%)
Al	428	73,2
PA	66,8	11,2
PC	11,9	2,1
PE	15,6	2,7
St Fe	14,2	2,4
Fe	16,5	2,8
Zn	11,2	1,9
Cu	18,7	3,2
Ag	0,9	0,2
Ni	0,2	0,02
NBR	0,2	0,03

Material	BON316F, 3 pole Weight (g)	BON316F, 3 pole (%)
Al	466	77,6
PA	66,8	11,2
PE	15,6	2,6
St Fe	14,0	2,3
Fe	14,5	2,4
Zn	8,4	1,4
Cu	14,0	2,3
Ag	0,9	0,2
Ni	0,1	0,02
NBR	0,2	0,03
NBR	0,2	0,03

Material	KSE325TPN, 3 pole Weight (g)	KSE325TPN, 3 pole (%)
Al	428,0	74,6
PA	66,8	11,6
PC	11,9	2,1
PE	15,6	2,7
St Fe	13,5	2,4
Fe	14,5	2,5
Zn	8,4	1,5
Cu	14,0	2,4
Ag	0,9	0,2
Ni	0,1	0,02
NBR	0,2	0,03

Material	KSF325TPN, 3 pole Weight (g)	KSF325TPN, 3 pole (%)
Al	461	77,5
PA	66,8	11,5
PE	15,6	2,6
St Fe	13,5	2,3
Fe	14,5	2,4
Zn	8,4	1,4
Cu	14,0	2,4
Ag	0,9	0,2
Ni	0,1	0,02
NBR	0,2	0,03
NBR	0,2	0,03

CAS numbers

Polyamide PA	25038-54-4
Polycarbonate PC	25766-59-0
Stainless Steel St Fe	12597-68-1
Steel Fe	12597-69-2
Zinc Zn	7440-66-6
Copper Cu	7440-50-8
Silver Ag	7440-22-4
Aluminium Al	7429-90-5
Nickel Ni	7440-02-0
Rubber NBR	9003-18-3
Polyethylene PE	9002-88-4

Packaging

The total weight for BON_/LBAS_/KSE_/KSF_ 3 pole enclosed and safety switches model packing material is about 20 g. The cardboard are used in the packaging materials, which are recyclable.

Cardbox: 100 %

ABB Oy

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Find the address of your local sales organization on the ABB homepage:

www.abb.com/contacts

> **Low Voltage Products and Systems**